

## ***EPC Program***

# **EPC-001**

# **EPC Hazard Communication Program**

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Technical Authority: E.R. Hewitt  
Functional Manager: J.A. Charboneau

## ***Written Hazard Communication Program***

### ***FOR***

EPC Project
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The purpose of this EPC program is to comply with the project-specific requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and PRC-RD-SH-13299, *Hazard Communication*. This program contains EPC project-specific information on hazard communication. It is to be used in conjunction with the CHPRC hazard communication program, PRC-RD-SH-13299. This program was prepared by an industrial hygienist supporting EPC and will be reviewed and updated annually by EPC OS&IH to ensure that the information contained in it, including personnel assignments, is current and accurate. This program applies to self-perform work, contract and subcontract employees. For self-perform work, a listing of personnel assignments relative to this program is contained in Appendix 1.

Subcontractors supporting EPC work are required to perform work under an approved written hazard communication program. Appendix 3 contains a basic contractor hazard communication program. This hazard communication program will normally be included in the Submittal Registry for subcontractors performing work with hazardous chemicals in support of EPC. However, a contractor or subcontractor may request that CHPRC accept their hazard communication program by providing a copy of the program. Subcontractors are required to comply only with Part VI, Vendors or Subcontractors, and Appendix 3 of this program.

In this program, the term Facility Chemical Custodian (FCC) is used to refer to the individual(s) assigned to perform certain assignments related to chemicals as detailed below. Though this may in some cases not be at a facility, the term is used for consistency with other CHPRC projects. This written hazard communication program will be available to employees in EPC on the Intranet on the EPC web site. Subcontractors who are utilizing this program can access it there.

The information in this program will be communicated to all affected employees during project-specific hazard communication training as outlined below.

### **Part I. CHEMICAL INVENTORIES**

Each area where chemicals are stored has a written chemical inventory, listing the hazardous chemicals currently used/stored in that area. Each chemical inventory is posted in the work area where the chemicals are used/stored and includes the following for each chemical: use/storage location, chemical identity (same as on the chemical's MSDS), chemical manufacturer, and Hanford MSDS number.

The Chemical Storage Area Custodian (CSAC) ensures that, prior to placing a hazardous chemical container in a storage area, the following actions will occur:

- Product container is tightly closed and covered and in good condition (no integrity dents, no excessive rust, seams are good, label is legible, etc.)
- Container is labeled as noted in Part 3 below;
- The Facility Chemical Coordinator (FCC) has been notified (via email message) of expiration dates for tracking in the Chemical Inventory Tracking System database (CITS), as necessary.

**Location(s) of chemical/product list:**

Subcontractors utilizing this program must identify the location of the chemical/product list in Appendix 1. The remaining information in this box applies to EPC self-perform work only.

At EPC, chemicals are stored in designated chemical storage areas, some of which are flammable safety cabinets. A listing of these storage areas is available on the storage assessment form (link below). This listing will be updated by the CSAC as chemical storage areas are added, removed or relocated. Each of these storage areas is properly labeled based on the materials being stored there. In most cases, a chemical inventory is kept at the chemical storage location. However, the inventory for a few of the storage locations will be kept in a nearby office. In those cases, the location of the inventory will be clearly noted at the chemical storage location.

The material safety data sheets (MSDS) are generally stored in an office near the chemical storage area, though a few of the MSDS are kept at the chemical storage location. As with the chemical inventory, the location of the MSDS will be clearly noted at the chemical storage location unless the MSDS are kept there.

**Person(s) responsible for updating chemicals inventory(ies):**

A Chemical Storage Area Custodian (CSAC) will be designated for each area where chemicals are stored. The CSAC is responsible for ensuring that a current chemical inventory list is maintained at each storage location with all appropriate data as found in the inventory report in CITS.

A monthly check of each storage location will be performed by the CSAC for that location. A copy of the form used to document the results of this check is available at the following link: [Blank EPC Chemical Storage Assessment Sheet.docx](#). During this check, the following items will be evaluated:

1. Is this area/cabinet still being used to store hazardous chemicals?
2. Is the storage area/cabinet in good shape? (not significantly damaged)
3. Does the area/cabinet have a unique identifier?
4. Is the area/cabinet labeled to indicate the presence of hazardous chemicals?
5. Is the inventory of chemicals kept at the area/cabinet or clearly identified at a nearby location?
6. Does the chemical inventory correctly indicate:
  - a. Each chemical being stored?
  - b. The amount of chemical allowed to be stored?
7. Are the MSDS present at the area/cabinet or is there a posted location for these?
8. Is there an MSDS for each chemical present?

If any of the above questions are answered "NO", the specific issue shall be noted on the evaluation form and fixed as soon as possible.

The chemical inventory will be updated by the CSAC with information on new chemicals whenever a new chemical is added to the storage area. A review of both agents and quantities will be performed at least every calendar quarter.

## Part II. MATERIAL SAFETY DATA SHEETS (MSDS)

A current MSDS for each chemical/product in the workplace will be available at all times for employees to review, as per requirements in PRC-RD-SH-13299, [Section 2.4](#).

### Location of MSDS file:

- Central Facility Files: Hanford MSDS files
- Work Area Files (if applicable): As noted in Part I, copies of the MSDS should be kept at or close to the work location. On an annual basis, during the January monthly check, each MSDS kept at the storage location will be evaluated (and replaced if necessary) to ensure that it matches the current MSDS in the online system.

### How can employees access MSDS files:

An employee can directly access the MSDS at the storage location or at the designated nearby location. A copy of the MSDS can also be obtained from the online MSDS system available on the Hanford Intranet. Contact your manager or supervisor if you need additional information.

### Person responsible for maintaining current workplace MSDS file:

The FCC is responsible for ensuring that a current MSDS is kept at the storage location or designated nearby location. For new chemicals, this means placing a new MSDS at the storage location. For existing chemicals, this means ensuring that the MSDS for the material matches the one currently being stored.

## Part III. LABELING SYSTEM

All chemical packages and containers will be clearly labeled to indicate the contents and the associated hazards. Each purchased container will have a label made by the manufacturer that includes the name of the material, name and address of the manufacturer, appropriate hazard warnings and cautions. If the label is missing or unreadable it must be replaced by a Hanford hazard label which will include the name of the material, the correct hazard ratings and warnings on the physical and health hazards of the material. Secondary containers must also have a Hanford label, subject to the exclusions for immediate use contained in [Section 2.5](#) of PRC-RD-SH-13299. All tanks and pipes must be labeled in the work areas to inform of their contents.

Call MSA MSDS Administration or EPC industrial hygiene for assistance in filling out a Hanford label.

### Person responsible for ensuring all incoming packages and containers are labeled properly:

The material coordinator (MC) is responsible for verifying that the incoming packages and

containers are properly labeled upon receipt of the chemical.

**Person to contact if container has no label or label is unreadable:**

If the original manufacturer container labels are missing, damaged or contain illegible information, the MC will attach a Hanford Hazard Label to the container as outlined in Appendix 1.

**Person responsible for ensuring pipes and tanks are labeled:**

The Design Authority (DA) shall ensure that pipes and tanks containing chemicals are properly labeled.

**Person responsible for reviewing labeling program:**

The FCC will review the EPC labeling program annually.

#### **Part IV. EMPLOYEE TRAINING**

Before beginning work with hazardous chemicals employees who use or may be exposed to hazardous chemicals in a foreseeable emergency will receive training on the following information.

1. Location of this written Hazard Communication Program.
2. Location of MSDS files and how to access them.
3. Location of list of chemicals in the workplace and work area.
4. Specific information about the chemical, hazards to which the worker may be exposed:
  - a. Health hazards - route of entry, signs of exposure, acute and chronic effects chemical properties, conditions that it may aggravate an existing health problem
  - b. How to prevent exposures to chemicals
  - c. Engineering and administrative controls present in the workplace and work area
  - d. Personal protective equipment (PPE) to be used when needed
  - e. Safe work practices
  - f. Spill control/emergency procedures
  - g. How to detect releases of chemicals/products

\* The training program must be reviewed by a facility health and safety professional to ensure the information is complete and correct.

Training is required for consumer products only if they are used in a manner that is different from normal consumer use.

<b>Person responsible for training employees:</b> The crew foreman.
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<b>Person responsible for writing and updating training program:</b> The FCC is responsible for developing the EPC Project-specific hazard communication information and training necessary to meet PRC-RD-SH-13299 training requirements. An IH supporting EPC will assist in developing this training as requested. The final training program will be reviewed at least annually by an IH supporting EPC. When a new chemical or product is introduced into the work area, the FCC, working with an EPC project IH, will evaluate the hazards of the new material to determine if additional training is necessary. It is NOT necessary to provide additional training when a new material is introduced unless the new material presents a new hazard. If a new hazard is introduced, the FCC (and the IH if requested) will update the training program to include the hazard, and provide documented supplemental training to the employees who have potential exposure to the new hazard.
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If new chemicals/products or jobs are introduced, affected employees must be trained on the new items prior to use. Employee attendance at such training sessions must be documented.

## Part V.

### NON-ROUTINE TASKS

Employees must be informed of the chemical hazards of tasks that are not routine. This shall be done in a safety meeting and in the work areas where these tasks are to be performed.

Safety meeting forms can be obtained from: Site Forms

#### **Person responsible for ensuring employees are informed of non-routine tasks:**

When non-routine work is planned involving chemicals, the hazards of the work will be evaluated using an Automated Job Hazard Analysis (AJHA) and/or Job Safety Analysis (JSA). This information will be communicated to employees during the AJHA session and the pre-job briefing.

#### **Work area training records will be kept in the following location(s):**

Training records for HAMMER courses on hazardous materials will be kept in the ITEM system. This includes both the general HAZCOM training contained in 24/40 hr HAZWOPER training, and the project-specific HAZCOM training for EPC. Supplemental training provided when a new material introduces a hazard into the work area will be documented and kept by the FCC in a field file.

EPC IH should be consulted to assist with information about non-routine tasks

## Part VI. VENDORS OR SUB-CONTRACTORS

Vendors and sub-contractors will be informed of the hazards of a facility, the emergency exits, emergency procedures, chemical hazards in the work area and how to access MSDS. The sub-contractors/vendors must also inform facility management and employees of the hazards associated with their work and chemicals/products they will use. The *Subcontractor/Vendor Pre-Job Hazard Communication Form* (Site Form A-6004-686 or its equivalent) must be used to document the hazard communication information shared between CHPRC and its subcontractors/vendors.

#### **Person responsible for informing sub-contractor:**

The FCC, working with the subcontractor/ vendor representative, must complete form A-6004-686 and review this information to determine if chemicals being used by EPC personnel may result in subcontractor exposure. If such exposure is anticipated, the FCC will provide information to subcontract employees on the hazards of these chemicals.

**Manager and supervisor responsible for informing CHPRC employees:**

If the FCC determines that, based on the information in A-6004-686 and A-6003-412, the chemicals being used by the subcontractor present a potential exposure hazard to CHPRC employees, the FCC will ensure that information is provided to the CHPRC construction manager on the hazards of these chemicals and the measures CHPRC employees can take to protect themselves from the chemicals. The construction manager will then work with the industrial hygienist to determine if training is required for CHPRC employees and provide this training for hazards associated with these chemicals.

**PROGRAM REVIEW AND APPROVAL**

This program was reviewed and approved by:

Typed Name \_Elton Hewitt, CIH, CSP\_\_\_\_\_ Signature: \_\_\_\_\_

Date: 10/26/2010\_\_\_\_\_.

## APPENDIX 1 - EPC Hazard Communication Program Personnel Assignments

The following role and personnel assignments are being made to ensure that the activities contained in this program are being implemented within the EPC Project. These assignments below (in the column CHPRC Assignee) apply ONLY to EPC self-perform work.

NOTE: This page will be updated separately from the remainder of this document, and a change in personnel assignments will only require an update to this page, as it is not a program revision.

Title	Definition	EPC Assignee
FCC	Facility Chemical Custodian	(To be assigned)
IH	Industrial Hygienist	Elton Hewitt
DA	Design Authority	(multiple individuals)
MC	Material Coordinator	James Kitchen
CSAC	Chem. Storage Area Cust.	Robert Urquhart

\*Note: If more than one individual is performing this function, indicate the primary contact.

## APPENDIX 2 – Hanford Hazard Label Instructions

**NOTE:** *All fields in the Hanford Hazard label are mandatory!* Any labels with missing information will be considered non-compliant.

1.	Product Name: MFG: Hazard Rating Date:																
2.	M.S.D.S. NO.	NFPA 704															
3.	HEALTH	<input type="text"/>															
4.	FLAMMABILITY	<input type="text"/>															
5.	REACTIVITY	<input type="text"/>															
6.	Specific Hazard																
7.	Target Organ																
8.	<table border="1"> <thead> <tr> <th colspan="5">HAZARD SEVERITY</th> </tr> <tr> <th>0</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> </tr> </thead> <tbody> <tr> <td>MINIMAL</td> <td>SLIGHT</td> <td>MODERATE</td> <td>SERIOUS</td> <td>SEVERE</td> </tr> </tbody> </table>		HAZARD SEVERITY					0	1	2	3	4	MINIMAL	SLIGHT	MODERATE	SERIOUS	SEVERE
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Block 1 requires three fields of information (as provided by the MSDS Administrator):

Chemical/**Product Name**, including product code/number if applicable

Chemical/product **MFG.** (Manufacturer or Distributor)  
**Hazard rating Date**

Block 2 requires the six digit **Hanford MSDS Number** only. NFPA 704 is for information only.

Block 3 requires the NFPA **Hazard Severity** rating number for **HEALTH**, as provided by the MSDS Administrator.

Block 4 requires the NFPA **Hazard Severity** rating number for **FLAMMABILITY**, as provided by the MSDS Administrator.

Block 5 requires the NFPA **Hazard Severity** rating number for **REACTIVITY**, as provided by the MSDS Administrator.

Block 6 requires the **Specific Hazard(s)** (as identified in Block 9 of label) that may apply (as provided by the MSDS Administrator).

Block 7 requires **Target Organ(s)**, as provided by the MSDS Administrator.

Block 8 for information only (do not circle).

Block 9 for information only (to be placed in Block 6, as provided by the MSDS Administrator).

Hanford Hazard Label information may be obtained via the MSDS System on the Intranet, or by calling the MSDS Administrator.

## APPENDIX 3 –Contractor Hazard Communication Program

**PURPOSE** This practice identifies a key aspect of the Industrial Hygiene (IH) program, and establishes the system and requirements for identifying pertinent information about chemical, physical, and biological hazards and communicating that information to employees.

**SCOPE** This practice includes the following major sections:

- Material Safety Data Sheets
- Labeling
- Project Planning
- Inventory
- Employee Communications
- Training
- Exposure Notification
- Employee Access to Information.

**APPLICATION** This practice applies to construction and subcontracted work activities managed by CHPRC and its subcontractors.

This practice does not apply to the following:

- Pesticides subject to the definitions in the Federal Insecticide, Fungicide, and Rodenticide Act
- Food, food additives, color additives, drugs, or cosmetics
- Distilled spirits intended for non-industrial use
- Hazardous waste
- Tobacco or untreated wood products
- A manufactured item that does not release a hazardous chemical under normal conditions of use

**Note!!!** The terms *Industrial Safety and Health* and *Occupational Safety and Health* should be considered synonymous.

## **MATERIAL SAFETY DATA SHEET**

The material safety data sheet (MSDS) is the primary documentation upon which the hazard communication program is based. It is the responsibility of the supplier or manufacturer to provide an MSDS that meets the following minimum requirements:

- [29 Code of Federal Regulations \(CFR\) 1910.1200.](#)
- Received copies of MSDSs are legible.
- Properly represent the product.

Employees who package, handle, transfer, or come in contact with hazardous chemicals receive specific training for those chemicals prior to initial use and periodically thereafter. Specific training includes the location of MSDSs and inventory list(s) in the workplace and how to access this information.

Line management ensures that materials received in the field have adequate MSDSs prior to use.

MSDSs for products in storage or in use are retained in the workplace. Methods for categorizing the MSDSs are established by the supervisor.

Employees have ready access to review and copy the MSDSs for chemicals they work with.

## **LABELING**

### **Manufacturer's**

#### **Label**

All chemical containers have the manufacturer's label attached. The manufacturer's labels and warnings are maintained and legible on all hazardous chemical primary containers (pure chemicals and mixtures). Additional labeling need not be applied to the container if the manufacturer's label contains the following information:

- Manufacturer name and address
- Identity of the chemical or material
- Associated health and safety hazards

If the information is not included on the manufacturer's label, one of the following actions is taken:

- Primary containers are labeled prior to shipment to the field to comply with federal regulations.
- The product is returned to the vendor or supplier.

**Note!!!** The supplier or vendor is in violation of [29 CFR 1910.1200](#), Paragraph (f) (1) when the required information is not provided.

### **Secondary**

#### **Container Labeling**

A hazard label ([Appendix 2](#)) is required for all secondary containers. Secondary containers include pots, buckets, and pans that are filled daily with the same material. Labeling is not required for single-use soak pans, paint pots, or buckets used for immediate work and not reused with the same product on subsequent days. If it is uncertain if labeling is required, the container is labeled or project safety is called for assistance.

## **PROJECT**

### **PLANNING**

As part of the prejob planning phase of a work effort, line management identifies hazardous agents (physical, chemical, and biological) intended for use, and secures a list of existing hazardous agents from the client. These agents are used to prepare an AJHA or JSA and supporting documents for the work effort, along with required engineering, administrative, and personal protective controls.

### **INVENTORY**

A listing of hazardous chemicals is maintained at each workplace, using identities that are referenced on the appropriate MSDSs.

**Note!!!** The listing may be a book of MSDSs appropriately labeled and periodically updated to reflect the workplace inventory.

## **EMPLOYEE**

**COMMUNICATIONS** The Hazard Communication Poster ([Poster](#)) is conspicuously placed on permanent bulletin boards (or where employees normally congregate if no bulletin board is present) in order to provide employees with easy reference to information on the hazard communication program.

Employees are given access to the hazard communication program when working in an FH-controlled work area or upon request. This access can normally be accomplished through the prejob planning or JSA review and signoff process.

## **TRAINING**

Employees are provided with an overview of the hazard communication program during the hiring process and at least annually thereafter.

New hires and rehires attend initial training that consists of the following:

- An explanation of this practice and hazard communication
- The name of the hazard communication representative
- An explanation of the hazard warning system, with an overview of how ratings are determined

Training for hazardous chemicals that are craft- and/or workplace-specific consists of the following:

- An overview of this practice, responsible persons, location of the MSDSs/inventory lists, and the method to access this information
- Detailed labeling instructions
- Identification of each chemical, specifying the following
  - Physical and health hazards
  - Methods and observations used to detect the presence or release of each chemical
  - Target organ(s)
  - Methods of handling relevant to the use of personal protective equipment and containment/spill control
  - Signs and symptoms of exposure

Training is updated as necessary to reflect changes, additions, and deletions.

## **EMPLOYEE**

### **ACCESS TO**

#### **INFORMATION**

Employees are allowed access to hazardous material information as described below:

- To see and copy exposure evaluation data for themselves and for other employees with work conditions similar to theirs (subject to Privacy Act restrictions).
- To observe monitoring activities being performed in their work area.
- To see and copy MSDS documents pertinent to their work.
- To see and copy this practice.
- To participate in safety evaluations of worksites, subject to the constraints of scheduling, procedure, privacy, and safety requirements. When employees are not in the work area when surveys are being performed, the results of the survey are transmitted to the appropriate level of management/supervision for communication to the affected employees.

# CHEMICAL HAZARD IDENTIFICATION

← Name of  
Chemical or Compound

**HEALTH HAZARD**  
4 Severe  
3 Serious  
2 Moderate  
1 Slight  
0 Minimal

**REACTIVITY**  
4 May detonate  
3 Shock and heat  
may detonate  
2 Violent chemical  
change  
1 Unstable  
if heated  
0 Stable

Product Name:										
MFG:										
Hazard Rating Date:										
M.S.D.S. NO.	NFPA 704									
<b>HEALTH</b>	<input type="checkbox"/>									
<b>FLAMMABILITY</b>	<input type="checkbox"/>									
<b>REACTIVITY</b>	<input type="checkbox"/>									
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A	W									
Oxidizer	Acid									
Base	Use no									
	Water									

**FIRE HAZARD**

Flash Points  
4 Below 73°F  
3 Below 100°F  
2 Above 100°F, Not  
Exceeding 200°F  
1 Above 200°F  
0 Will not burn

**Specific Hazard**

Oxidizer	OX
Acid	ACID
Alkali	ALK
Corrosive	COR
Use NO WATER	W
Target organ	

## ACCESS TO MEDICAL AND EXPOSURE RECORDS

YOU HAVE THE RIGHT TO SEE AND COPY:

- Your medical records and records of exposure to toxic substances or harmful physical agents.
- Records of exposure to toxic substances or harmful physical agents of other employees with work conditions similar to yours.
- Material Safety Data Sheets or other information that exists for chemicals or substances used in the workplace, or to which employees may be exposed.

THESE RECORDS ARE AVAILABLE AT: \_\_\_\_\_

FROM (person responsible): \_\_\_\_\_

A COPY OF THE CONSTRUCTION SAFETY STANDARD  
IS AVAILABLE FROM: \_\_\_\_\_